

HOW THINGS HAVE CHANGED

As this is my last column for the year I would like to share some interesting figures that have crossed my desk this year. I receive multiple surveys and ratings on many things, including some from companies asking to promote their products. This is one area I shy away from.

Trends in home building and energy use have changed dramatically over the past 10-20 years. In 1993 an average home in Canada had an occupied space of 1378 sq ft. By 2003 this had risen to 1425 sq feet, nearly a 4% increase in living space. Nearly 60% of Canadian Homes have been built after 1969. One very interesting fact is that almost 50% of low-rise apartments in Canada are built in Quebec. Ontario has over 35% of all the single family dwellings built in Canada.

From an assembly and energy efficiency point of view, it has taken far longer than it should have to change our energy use. Right up until 1997, less than 50% of basements were insulated, by 2003 it had risen to just over 60%. It has taken a while for homeowners to realize that up to 35% of the total heat loss in a home escapes thru your basement walls. Attics however were better, 83% of homes built after WW2 had attic insulation, today its 100% of every new home. There is a rating on how much energy is consumed in a heated area. While this is not a real science, there are some interesting figures. From World War Two to the late 60's, there was practically no change in the levels of energy use in the average Canadian home, actually the change right through to 1978 was minimal. The drop in energy use was nearly 25% from 1980 onward. However it had not dropped substantially until after 2003. It is now dropping at a slow rate of approximately 4% up to 2006 when the last figures were available. This is surprising given the information about energy costs that began to be common knowledge in the mid 90's. Even more surprising is the fact that nearly 90% of Canadians said they are energy conscious. Seems we talk more than we actually do!

As far as heating a home, other than Quebec where over 60% of homes are heated by electricity, in the rest of Canada nearly 75% of homes are heated with a fossil fuel forced air-heating system. Natural gas is the largest energy source; over 50% of homes are heated with gas. 65% of the homes that were built from 1990 to 2003 are heated with natural gas. Natural gas, where available is the largest conversion fuel when a new furnace is considered by a homeowner. One surprising fact is that less than 15% of homes are heated with fuel oil and the largest percentage of that is in Eastern Canada where 40% of homes are heated by oil. Programmable thermostats have made an impact, over 40% of all homes in Canada now use one of these energy saving devices and 75% of Canadians reported they actually use the program feature.

As the climate changes, Canadians have added air conditioning and have they ever! In Ontario alone by 2003 nearly 74% of homes were air-conditioned. It seems the ocean provinces really don't need this convenience, less than 10% of

Maritimers have A/C and in British Columbia it's less than 20% of their homes. We all understand the need for reducing appliance energy and one of the largest users of energy is your clothes dryer. It seems our neighbours in the Maritimes and Quebec are leading here; nearly 30% of them hang their clothes on a line to dry. In Ontario it's less than 10%. We are getting the message on water conservation, over 50% of all homes now have a water saver showerhead and some form of flow reduction on taps. In 2003 only 25% of Canadian homes used energy saving lighting, by 2006 it had shot up to over 60% that were using the new pigtail fluorescent bulbs. Gas fireplaces certainly gained in popularity, in 1993 less than 5% of Canadian homes had one of these installed, by 2003 it was nearly 20%. In 2001 the EnergyStar rating for appliances arrived in Canada and the popularity of this rating system caught on quickly. By 2003 83% of all refrigerators sold were EnergyStar rated. Today EnergyStar rates not only appliances; it includes such installations as your furnace and even new homes.

At this time of year, especially this year with our economy suffering, I humbly ask each of you to gather any spare change and contribute it to your favorite charity. Our food banks and charities like the Salvation Army need our help badly this year. I would also like to express my "Thanks" to the many contributors who took their time this past year to allow me into their workplace or take their time to answer my questions. The list would fill a page alone. A special "Thanks" to Shawn, Tom, Steve and Moe from the All-Tech Group who contributed a number of times over the year. Without these professional trades and engineers I would not be able to confirm and contribute the information I use every week. A "tip of the hat" to the Folks at the Kingston Whig Standard, my home paper, and especially Glen who allow me the space to write this every week. A number of other papers now carry this column and to each of those editors "Thank You" for your support.

Lastly to the hundreds of readers who have written or e-mailed me with questions and thoughts, without your contribution this weekly information column would not exist...Thank You and Best Wishes for the Holiday Season...